St. Charles Parish GIS Update

Presented To
The St. Charles Parish Council

By Luis Martinez

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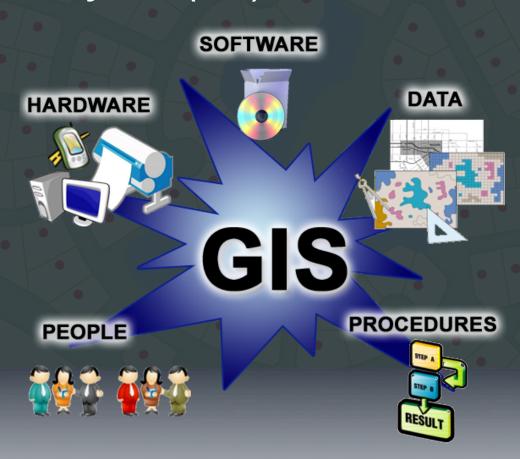
Overview

- What is a Geographic Information System (GIS)
- History of GIS in St. Charles Parish
- Current parish-wide Enterprise GIS
- What we do & present day capabilities
- What does GIS provide to the parish?
 - Parish departments
 - Citizens of St. Charles Parish
- Future GIS efforts

What is GIS?

Geographic Information System (GIS)

- A system of hardware and software used for storage, retrieval, mapping, and analysis of geographic data.
- A GIS links locational and database information and enables a person to visualize patterns, relationships and trends
- Gives a new perspective to data analysis that cannot be seen in a list or table format.



History of GIS in St. Charles Parish

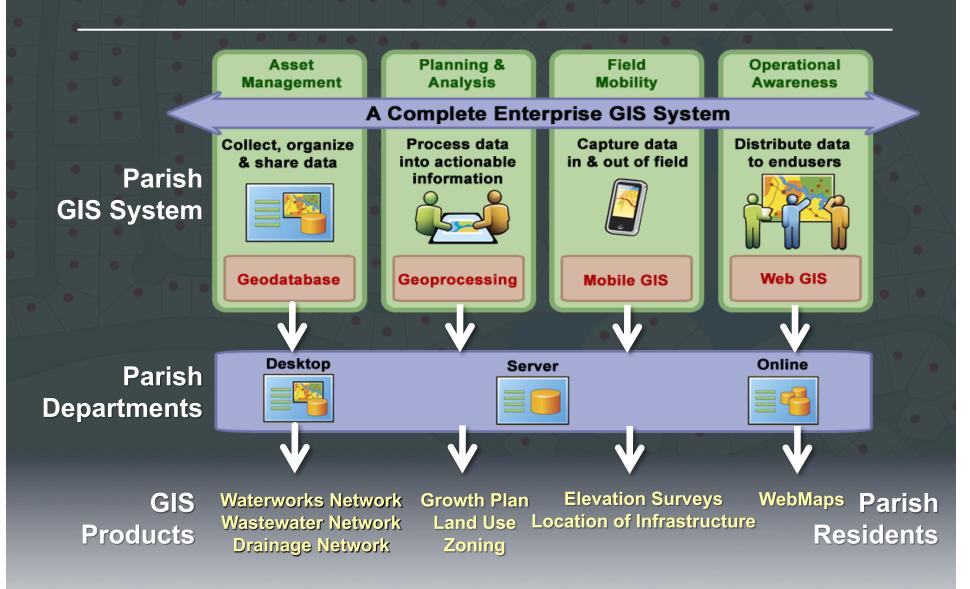
<u>Past</u>

- Previously, all GIS work was contracted out since 2002
- All data was maintained on an off site server (\$2,500/mo.)
- Updates to data layers inconsistent (even more \$\$\$)
- Departments depended on contractor for maintenance and accuracy of data

Present

- Since inception, no GIS tasks contracted out
- All parish data resides on dedicated GIS Database
- Updates are performed by someone in each department
- Departments responsible for maintenance and QAQC of their data

Current Parish GIS



What GIS Has to Offer...

GIS Map Products

Parish Street Map Infrastructure Planning Survey Data



Web GIS Products

Interactive Maps
Public Access
Internal Access
Secure Web



Data Maintenance

Field Edits & QAQC
Improved Accuracy
Improved Efficiency
Time Efficient
Significant Cost Savings

Authoritative Content Producers



Configurable & Shared

Daily Work Flows & Routines
Production Tools



GIS Data Products

Maps Aerial Photographs Survey Data

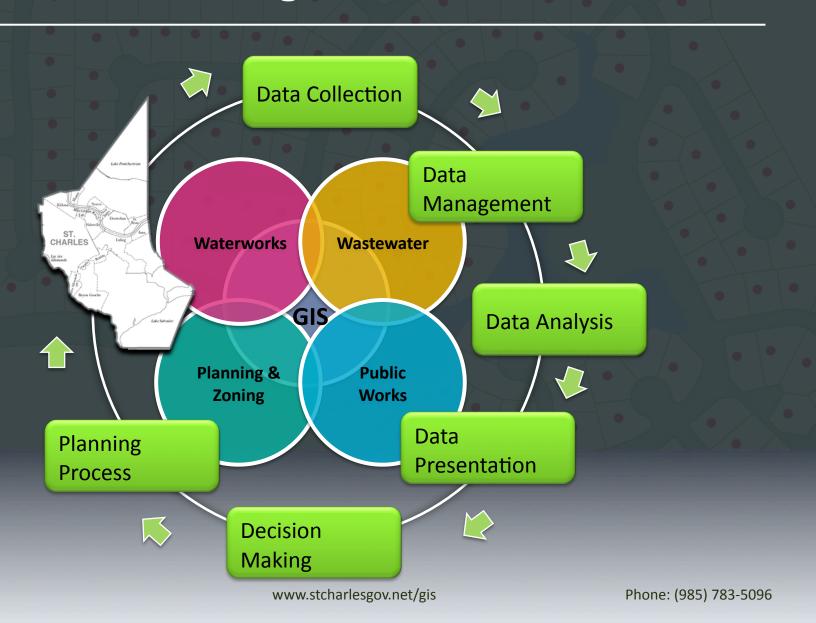
Parish GIS Products

- About 100 GIS data layers reside in database and growing...
- Variety of map products such as:
 - Aerial Photos
 - Elevation
 - NEW Flood maps
 - Zoning Maps
 - Voting Precinct Maps
- Will be available for download via GIS page on parish website

GIS Product	Public Domain		Distributable
Aerial & Satellite Imagery			
Parcels	1	1	
Street Centerlines	I I	1	1
Street Edges		l I	
Building Footprints		1	
Community Boundaries	ı		1
Parish Boundary	ı		I
Fire Districts	ı	l l	
Council Districts	1	ı	
Parks & Recreational Areas	1	1	
Elevation	1	1	<u> </u>
Levee Centerlines & Elevation		1	
Flood Zones	1	1	
Advisory Flood Zones	1	ı	
Subdivision Boundaries	1	ı	
Addresses		1	<u> </u>
Gas Wells	1	1	
Geology & Soil Types	1	1	
Land Use		l l	
Land Cover		1	<u> </u>
Major & Local Water Bodies	1	ı	
Government Buildings	1	1	
Pump Stations		1	
Water Lines & Features		ı	<u>:</u>
Wastewater Lines & Features		1	
Drainage Infrastructure		ı	
School Districts	1	I	·

How is GIS Being Used?

7/6/11



Current Major Projects

- Street map update
- East bank Drainage data collection
- West bank storm protection
- Wastewater network data collection/update
- Waterworks network data collection/update
- Web mapping application(s)
- Survey grade Levee data collection for storm surge modelling
- Address database





GIS Contractor Costs Incurred to Date

Total Spent on Professional Services up to 2010

- Upfront costs for GIS are typically pretty high
- Typical Enterprise GIS takes about 8 years to reach maturity

Parish GIS Coordinator **Hired November 2008**

	Year	Total Paid		
	2002	341,000.00		
	2003	687,456.00		
	2004	388,955.00		
	2005	393,509.20		
Y	2006	461,575.90		
	2007	725,305.09		
	2008	82,096.07		
	2009	0.00		
	2010	0.00		
	Total Paid			
	40.004.007.50			

\$3,024,397.56

Future GIS Efforts

- Parcel Management Application
- Permitting Application
- Asset Management Database
- Release Version 2.0 of Web GIS
- Online Tide Gauge Monitoring
- GIS Outreach & Education
- Continue Waterworks, Wastewater & Drainage Infrastructure Data Collection



Questions & Comments

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